

The adequacy of the existing roadway system is evaluated by comparison of traffic volumes to the ability of the roads to move traffic freely at a desirable speed. The ability of a facility to move traffic freely, safely, and efficiently with minimum delay is controlled primarily by the type and spacing of traffic control measures. Thus, the ability of a road to move traffic can be increased by restricting parking and turning movements, using proper sign and signal devices, and by applying other traffic engineering strategies.

Capacity is the maximum number of vehicles which have a “reasonable expectation” of passing over a given section of roadway, during a given time period under prevailing roadway and traffic conditions. Roadway capacities and 2000 average daily traffic for facilities in Davie County are shown in Figure 5 and listed in Appendix B, Table B-1. Currently, the following facilities in Davie County are over capacity:

- US 601: From the southern MUPB to US 801
- US 158: From Forsyth County to the Hillsdale Town Limits and from US 801 to SR 1442 (Redland Road)
- NC 801: From I-40 to SR 1661 (Overlook Drive)

Additionally, the following facility in Davie County is nearing capacity:

- US 64: From US 801 to Davidson County

The relationship of traffic volumes to the capacity of the road determines the level of service (LOS) provided. Six levels of service have been defined, with letter designations from A to F. LOS A represents the best operating conditions and LOS F represents the worst.

The definitions of levels of service are general and conceptual in nature. Levels of service for interrupted flow, or signalized, facilities vary widely in terms of both the users perception of service quality and the operational variables used to describe them. The 1995 Highway Capacity Manual contains more detailed descriptions of the levels of service as defined for each facility type. The six levels of service, whose definitions follow, are illustrated in Figure 4.